## **USER MANUAL**

61301604063 Rev. A





## **USER MANUAL**



#### Getinge/Castle, Inc.

1777 East Henrietta Road Rochester, New York 14623-3133 Phone: (800) 950-9912 USA Facsimile: (800) 950-2570



#### USER MANUAL 61301604063

Rev. A (09/25/2000)—First release

#### **Related Publications:**

Customer Manual—keyed to the customer's specific serial number

#### **DESCRIPTION OF SYMBOLS & NOTES IN MANUAL**

The following symbols with related notes appear in this manual.



"Warning" notes alert the user to the possibility of personal injury.



"Caution" notes alert the user to the possibility of damage to the equipment.



"Notes" alert the user to pertinent facts and conditions.



This manual contains proprietary information of Getinge/Castle, Inc. It shall not be reproduced in whole or in part without the written permission of Getinge/Castle, Inc.

 $\mbox{\bf Castle}^{\mbox{\it R}}$  and  $\mbox{\it MIP}^{\mbox{\it S}}$  are registered trademarks of Getinge/Castle, Inc.

Copyright ©2000 by Getinge/Castle, Inc.

## **Table of Contents**

S

Section 1	General Descri	WARNINGS SUMMARY vii PERSONNEL SAFETY vii Load Conveyor Clutch vii Load Hopper Safety Shut-off vii Top Access Panel Safety Shut-off vii LABELS viii
		INTRODUCTION
		Configurations
		Application
		EXTERIOR COMPONENTS 1–2
		Access Panels
		Automatic Conveyor Stop (option) 1–3
		Control Panel
		Conveyor
		Conveyor Drive Motor
		Dispenser Drive Motor
		Exhaust Vent
		Hopper Lid
		Mains Disconnect
		Storage Hopper
		Top Panel
		INTERIOR COMPONENTS
		Dispenser Drive (not shown)
		Hopper Safety Gate
		PROCESSING DESCRIPTION
		STANDARD FEATURES
		All Stainless Steel Construction
		Hopper Capacity
		Easy Hopper Loading
		Automatic Dispensing 1–6
		Operator Control Panel
		Powered Roller Conveyor System 1–6
		Water Collection Area With Debris Screen 1–6
		Cleanout Access Ports
		Exhaust

61301604063 iii

	OF	PTIONS	1–7 1–7 1–7
Section 2	<b>The Control Panel</b>		_
		TRODUCTION  ONTROL PANEL  Switches  POWER  START  EMERGENCY STOP  ADJUSTABLE SPEED—DISPENSER DRIVE  DISPENSER DRIVE ON/OFF  CONVEYOR DRIVE ON/OFF  DISPENSER DRIVE REVERSE/FORWARD  DUST COLLECTOR (option)  Indicators  POWER  CONVEYOR FULL  DISPENSER DRIVE ON.  CONVEYOR DRIVE ON.  CONVEYOR DRIVE ON.  DUST COLLECTOR ON (option)  EMERGENCY STOP	2-2 2-2 2-2 2-3 2-3 2-3 2-3 2-3 2-3 2-3
Section 3	<b>Operating Instruct</b>	ons	
	SE	REPARING Daily Checklist Compatible Bedding Types* Refilling The Hopper ETTING Cages For Use Today Cages For Use Later PERATING Start-up Operation CONVEYOR FULL End Of Daily Operation MERGENCIES Emergency Stop EMERGENCY STOP POWER	3-1 3-2 3-3 3-3 3-3 3-4 3-4 3-4 3-5 3-5 3-5

		Emergency Power Shutoff	
Section 4	Maintenance		
		GENERAL MAINTENANCE SCHEDULE	4–3 4–3
Section 5	Troubleshootin	g	
		TROUBLESHOOTING	
Section 6	Installation Ins	tructions	
		INTRODUCTION INSTALLATION OPTIONS. FACILITY REQUIREMENTS TECHNICAL DATA. Service Requirements General Notes On Utilities NOTE 1—ELECTRICAL CONNECTION NOTE 2—EXHAUST SYSTEM. UNCRATING AND INSPECTION. Uncrating & Equipment Inspection. INSTALLATION Equipment Location Leveling The Machine Utilities Electrical STARTUP. CHECK-OUT Fill the hopper Run the unit	6-1 6-2 6-2 6-2 6-2 6-3 6-3 6-3 6-4 6-4 6-4 6-5 6-5
Section 7	Options		
		INTRODUCTION	7–2 7–2 7–2 7–2

61301604063 v

Conveyor Stop	7–3
DESCRIPTION	
USER CONTROLS	
MAINTENANCE REQUIRED	_

## Index

## **Safety Features**

#### WARNINGS SUMMARY



The following warnings apply to general operation of the bedding dispenser. Keep them in mind as you operate the unit:



 FALL HAZARD: Areas located immediately around the bedding dispenser may become a fall hazard due to water drippage.
 For a safe environment, ensure the floor is kept clean and dry.

#### SAFETY FIRST

DON'T TAKE CHANCES

 PERSONAL HAZARD AND EQUIPMENT DAMAGE: Safe and efficient operation of this equipment requires scheduled preventative maintenance. Routine adjustments and replacement of parts by other than authorized maintenance personnel may result in personal injury or cause the equipment to perform to less than its capabilities.



 SHOCK HAZARD: Before performing any service or maintenance on the washer, disconnect all utilities and follow the lockout/tagout procedures to ensure safety and prevent accidental shock.

#### PERSONNEL SAFETY

The following safety features have been installed to protect the operator.

#### **Load Conveyor Clutch**

The load conveyor is driven through a clutch to prevent motor failure in the unlikely event that the conveyor becomes jammed and/or obstructed. The clutch has been properly set by Getinge/Castle, Inc., upon shipment of the unit and should only be adjusted by an authorized service technician that is familiar with the equipment.

#### **Load Hopper Safety Shut-off**

The load hopper has a safety gate to prevent the operator from contacting the conveyor. Removing the grid activates this safety shut-off switch and stops both the dispenser drive and the load conveyor.

## **Top Access Panel Safety Shut-off**

The top access panel also has an automatic safety shut-off switch. Removing the top access panel activates the safety shut-off switch and stops both the dispenser drive and the load conveyor.

61301604063 vii

The following labels on the Control Box and Power Box alert service personnel to possible hazards.



#### HIGH VOLTAGE

CAUTION: To reduce the risk of electrical shock, do not remove cover. Refer servicing to qualified service personnel.

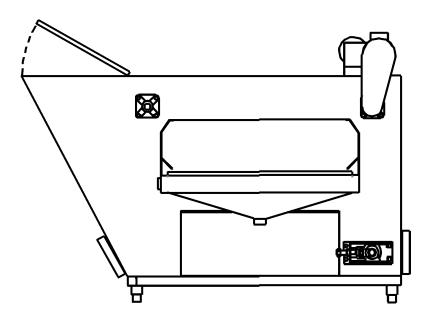


ATTENTION: Refer to accompanying documents for further information.

## **Section 1 General Description**

### **INTRODUCTION**

Figure 1-1. SERIES 1750 BEDDING DISPENSERS



The MTP Series 1750 bedding dispensers automatically dispense bedding into cages as each cage moves through the filling chamber. Dispensed bedding volume is adjustable to accommodate various depths and sizes of cages.

## **Configurations**

MODEL	1730	1736	1742	1748	1754
Belt width	24"	30"	36"	42"	48"
Roller width	30"	36"	42"	48"	54"

## **Application**

For use in research animal care laboratories and facilities to automatically dispense dry, chip type, free flowing, solid bedding into animal cages.

61301604063

## **EXTERIOR COMPONENTS**

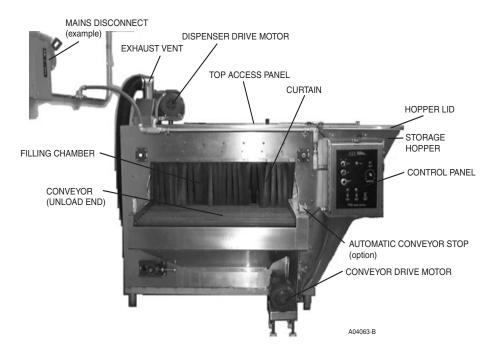
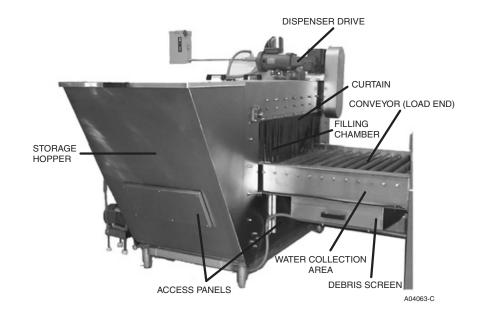


Figure 1–2. EXTERIOR COMPONENTS (unload end)

Figure 1–3. EXTERIOR COMPONENTS (load end)



Access Panels Allow access to the lower portions of the interior for maintenance and

service.

**Automatic Conveyor Stop** 

(option)

Stops bedding dispenser operation when items reach the end of the

conveyor.

Control Panel Mounts the switches and indicators for setting and operating the bedding

dispenser.

Conveyor Load End—Moves the load from the tunnel washer into the filling chamber

Unload End—Moves the load from the filling chamber to be unloaded.

Conveyor Drive Motor Propels the conveyor.

**Dispenser Drive Motor** Propels the dispenser drive (see INTERIOR COMPONENTS on page 1–4).

**Exhaust Vent**Removes air, dust, and other particles from the interior of the bedding

dispenser to prevent inhalation by personnel. The exhaust materials are either filtered through an in-line filter before venting, or trapped in an

optional dust collector.

**Hopper Lid** Covers the area for filling the storage hopper.

Mains Disconnect Turns main power from the electrical utility lines ON and OFF.

**Storage Hopper** Contains unused bedding for use in the dispenser drive.

**Top Panel** Allows access to the top of the dispenser drive for maintenance and service.

Water Collection Area A drained area under the conveyor to allow newly washed cages to drain

after they exit the tunnel washer.

61301604063

### **INTERIOR COMPONENTS**

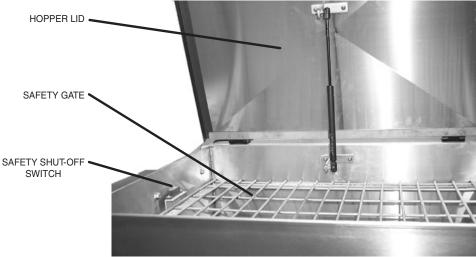
### **Dispenser Drive (not shown)**

Carries bedding from the storage hopper over the top of the filling chamber and back to the storage hopper (see Figure 1–5. on page 1–5). The operator can adjust the speed of the dispenser drive to adjust the level of fill.

## **Hopper Safety Gate**

Prevents the operator from contacting the dispenser. The operator leaves the safety gate in place to fill the hopper with bedding. The safety gate also keeps larger objects—such as pieces of packaging or large clumps of bedding—from entering the storage hopper. The safety shut-off switch stops the unit if the safety gate is not in place.

Figure 1-4. HOPPER SAFETY GATE

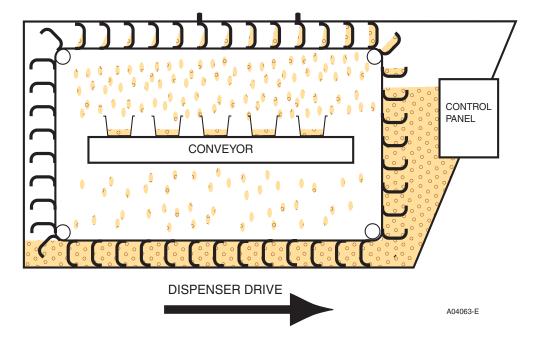


A-04063-D

#### PROCESSING DESCRIPTION

Before starting daily operation, the operator fills the storage hopper with bedding. At the start of the processing period, the operator activates the unit. Washed cages first exit the tunnel washer and travel on the conveyor to the bedding dispenser. As each cage passes through the filling chamber, the dispenser drops bedding into the cages (see Figure 1–5). To adjust the level of the bedding in the cages, the operator varies the speed of the dispenser drive. After the cages exit the filling chamber, the controls alert the operator that the process is complete. The cages are then manually unloaded from the conveyor.

Figure 1–5. THE FILLING CHAMBER (from UNLOAD END)



61301604063

#### STANDARD FEATURES

## All Stainless Steel Construction

The dispenser is manufactured completely from stainless steel including the conveyor cage transfer belt and the bedding filling system.

#### **Hopper Capacity**

Storage capacity is twelve cubic feet.

#### **Easy Hopper Loading**

The storage hopper is filled by dumping the bedding from the bag into the stainless steel hopper. The storage hopper has a stainless steel lid and a stainless steel safety gate. If the safety gate is removed during the operation of the unit, the cycle will stop until it is replaced. This protects the operator from the moving dispenser mechanism. This gate also filters any large pieces of bedding which may enter the storage hopper.

#### **Automatic Dispensing**

As washed cages pass through the filling chamber, bedding is automatically dispensed into the cages. Bedding levels can be altered by changing the speed of the stainless steel filler conveyor belt (dispenser drive).

#### **Operator Control Panel**

A stainless steel operator's control panel containing switches and indicators is mounted on the unit.

## Powered Roller Conveyor System

The cages are transported through the filling chamber by powered stainless rollers. The belt powered rollers are on 3" centers and are provided with stainless steel roller bearings. The roller system has no pinch points and will not carry the bedding out of the dispensing section.

## Water Collection Area With Debris Screen

At the load end is a stainless steel water collection area that drains the excess water from the cages. Provided is a stainless steel removable drawer debris screen to collect any item that may have fallen onto the load area of the bedding dispenser.

#### **Cleanout Access Ports**

Provided are large access panels on two sides of the lower hopper to aid in cleaning.

#### **Exhaust**

The unit has an exhaust vent and a washable in-line filter.



- The exhaust vent cannot be tied into the exhaust vent system from the washing equipment. The exhaust from the bedding dispenser contains dust particles and must be kept dry through the entire exhaust system.
- The washable in-line filter is not included if the optional Dust Collection System is selected.

#### **OPTIONS**

**Automatic Conveyor Stop** 

A photoelectric switch at the end of the unload end conveyor automatically stops the conveyor drive when an item reaches the end of the conveyor.

**Dust Collection System** 

Connected to the exhaust from the bedding dispenser to remove dust generated by the filling operation and to eliminate the need for connection to building exhaust. System is interwired with the bedding dispenser and equipped with an On/Off switch mounted on the control panel.

Right Service Side Installation

When this option is selected, the unit is installed with the service area and operating end control terminal to the right of the load end of the unit.

**Standards And Codes** 

Washer can meet the applicable requirements of:

- UL—Main Control Panel is fully inspected and labeled in accordance with the UL standards
- Seismic Requirements per California Administrative Code

61301604063

General	Πρεσ	rin	tion
General	Desc	บเม	uon

## **Section 2** The Control Panel

## **INTRODUCTION**

Using the control panel, the operator:

- Selects processing settings.
- Starts and stops the bedding dispenser.
- Knows when to unload the conveyor.
- Adjusts the level of bedding filling the cages.
- Clears jams in the dispenser.
- Turns the dust collector (option) on and off.

61301604063 2–1

### **CONTROL PANEL**

※GETINGE Castle ON OFF POWER CONVEYOR FULL HIGH LOW ADJUSTABLE SPEED DISPENSER DRIVE **EMERGENCY** (OPTION-NOT ON ALL UNITS) FORWARD REVERSE DISPENSER DISPENSER CONVEYOR DUST DRIVE COLLECTOR 1700 BEDDING DISPENSER A04063-A

Figure 2-1. CONTROL PANEL

**Switches** 

#### **POWER**

Turns power to the unit ON and OFF.

(controls only— does not disconnect equipment from AC voltage)

#### **START**

Starts the unit: whichever items are switched on by the toggles belowtypically the conveyor and the dispenser.

#### **EMERGENCY STOP**

Stops the conveyor and the dispenser.

#### ADJUSTABLE SPEED—DISPENSER DRIVE

Controls the speed at which bedding is dispensed.

- SLOW—dispenses less bedding into each cage
- FAST—dispense more bedding into each cage

#### **DISPENSER DRIVE ON/OFF**

Controls power to the dispenser drive.

- ON—the indicator lights and bedding is continually dispensed.
- OFF—no bedding is dispensed.

#### **CONVEYOR DRIVE ON/OFF**

Controls power to the load conveyor.

- ON—the indicator lights and the conveyor moves at the selected speed.
- OFF—the conveyor does not move.

#### DISPENSER DRIVE REVERSE/FORWARD

Controls the direction of the dispenser drive. Remains on FORWARD, unless there is a jam (see Section 5, Troubleshooting).

To set to REVERSE, press and hold the switch.

To return to FORWARD, release the switch.

- FORWARD, bedding is continually dispensed from the hopper.
- REVERSE, no bedding is dispensed. The dispenser moves backward.

#### **DUST COLLECTOR (option)**

This switch controls the dust collecting system.

- When ON, the indicator lights and the dust collector removes excess dust from the exhaust.
- When OFF, the dust collector does not function. Usually set to ON.

#### **Indicators**

#### **POWER**

Lights when power to the unit is ON.

#### **CONVEYOR FULL**

Lights when the conveyor is full. Lights when the load activates the automatic conveyor stop (option). To continue processing, the operator must remove the processed items.

#### **DISPENSER DRIVE ON**

Lights when the dispenser drive is ON.

#### **CONVEYOR DRIVE ON**

Lights when the conveyor drive is ON.

61301604063 2–3

## **DUST COLLECTOR ON (option)**

Lights when the dust collector is ON.

### **EMERGENCY STOP**

Lights when EMERGENCY STOP is pressed.

## **Section 3 Operating Instructions**

To fill cages, the dispenser is operated with a tunnel washer. As each cage passes through the filling chamber, bedding is dispensed into it. Levels can be adjusted by varying the speed of the dispenser drive. After the cages exit the unit, they are manually unloaded from the unit.

This section has the following parts:

- PREPARING
- SETTING
- OPERATING
- EMERGENCIES

#### **PREPARING**

#### **Daily Checklist**

Before operating the bedding dispenser each day:



Danger of falling. The surrounding floor may be slippery with spilled bedding. When around the bedding dispenser, walk carefully to maintain balance and avoid injurious falls.

- 1. Check the hopper and refill it if necessary (see below, *Refilling The Hopper*).
- 2. Clean the door apron(s) with a damp cloth.
- Clean the debris screen in the water collection area.

#### **Compatible Bedding Types\***

The bedding dispenser uses dry, chip type, free flowing, solid bedding. Some examples are listed below:

wood shavings hard wood chip soft wood chip

cob materials paper (chip type) pelletized

\*Bedding types must be dry and free flowing.

61301604063 3–1

## **Refilling The Hopper**

Fill the unit with bedding by dumping bedding into the hopper. Be sure to fill the unit to capacity.

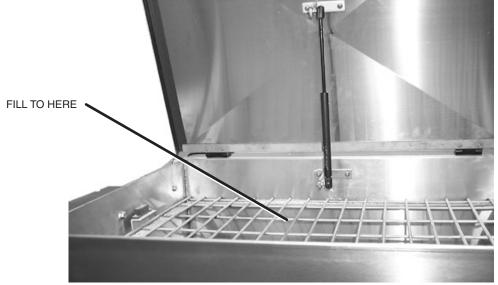
- 1. Open the hopper lid. Keep the safety gate in place.
- 2. Fill the hopper with bedding.



NEVER OVERFILL THE HOPPER CAPACITY.
Otherwise the dispenser drive may jam. If this occurs, see "TO CLEAR THE DISPENSER DRIVE" on page 5–2.

3. Continue to fill the hopper until the level of bedding reaches the bottom of the safety gate (see Figure 3–1).

Figure 3-1. FILLING THE HOPPER



A-04063-H

#### **SETTING**

#### **Cages For Use Today**

Objective: Fill the cages with fresh bedding for immediate use.

#### Typical Settings For Use Today—Series 1750

CONTROL TYPICAL SETTING

ADJUSTABLE ADJUST:

SPEED LOW=lower level of bedding
DISPENSER DRIVE HIGH=higher level of bedding

DISPENSER DRIVE **ON** 

(on/off)

CONVEYOR DRIVE ON

(on/off)

DISPENSER DRIVE FORWARD

(direction)

DUST COLLECTOR ON

(option)

**Objective:** Do not fill the washed cages with bedding. Stack and store them until needed.

## **Cages For Use Later**

#### Typical Settings For Use Later—Series 1750

CONTROL TYPICAL SETTING

ADJUSTABLE not applicable

SPEED

DISPENSER DRIVE

DISPENSER DRIVE OFF

CONVEYOR DRIVE ON

(on/off)

(on/off)

/-#)

DISPENSER DRIVE (direction)

**FORWARD** 

DUST COLLECTOR

(option)

OFF

61301604063 3–3

#### **OPERATING**

#### Start-up

- 1. Load the hopper with bedding (see "Refilling The Hopper" on page 3–2).
- 2. Turn ON the mains disconnect switch.
- 3. On the control panel, turn ON the POWER switch.

#### **Operation**

#### On the control panel:

1. Turn ON the CONVEYOR DRIVE.



As soon as the DISPENSER DRIVE is ON, bedding will travel from the hopper to be dropped onto the conveyor. Do not turn ON the DISPENSER DRIVE until you are ready for this to occur.

- 2. Set the DISPENSER DRIVE (see "SETTING" on page 3–3).
  - ON to fill the cages with bedding.
  - OFF to let the cages pass through without filling.
- Press START.
- 4. Adjust the speed of the DISPENSER DRIVE as required.
  - For a lower level of bedding in each cage, turn toward LOW.
  - For a higher level of bedding in each cage, turn toward HIGH.

#### **CONVEYOR FULL**

### When CONVEYOR FULL lights on the control panel:

- the conveyor stops
- the dispenser drive stops
- the tunnel washer conveyor stops
- 1. Remove processed items from the conveyor.
- Conveyors and the dispenser drive resume automatically.

### **End Of Daily Operation**

After daily operation, turn OFF the POWER switch.

#### **EMERGENCIES**

#### **Emergency Stop**

In an emergency, stop the bedding dispenser immediately. Use either procedure below.

#### **EMERGENCY STOP**

- Press EMERGENCY STOP.
  - The bedding dispenser ceases operation.
  - The conveyor of the tunnel washer stops.
  - An alarm sounds at the load end of the tunnel washer.
- To restart the bedding dispenser:
  - a. Pull out EMERGENCY STOP to reset the switch.
  - b. Press START.
- OR —

#### **POWER**

- 1. Turn OFF the POWER switch.
  - The bedding dispenser ceases operation.
- 2. To restart the bedding dispenser:
  - Turn ON the POWER Switch.
  - b. Press START.

### **Emergency Power Shutoff**

In an emergency, it may be necessary to remove electrical power from the bedding dispenser. All operators should know the location of the mains disconnect circuit breaker at the bedding dispenser site.



The POWER switch turns OFF the controls only; it does not remove all power from the bedding dispenser.

#### **TURNING OFF ELECTRICAL POWER**

Turn OFF power to the bedding dispenser at the mains disconnect circuit breaker (see Figure 1–2. EXTERIOR COMPONENTS (unload end)).

61301604063 3–5

Operating Instructions	

## **Section 4** Maintenance

#### **GENERAL MAINTENANCE SCHEDULE**

The customer is responsible for these maintenance items at the intervals specified. Optional items may require additional maintenance. Refer to your Customer Manual for this information.

#### PERFORMANCE ASSURANCE PLAN

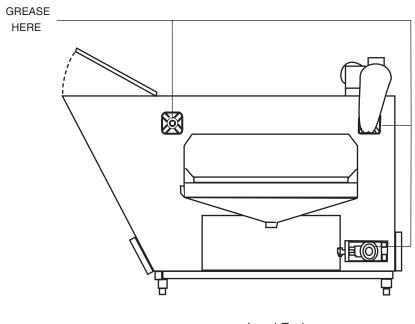
Preventive maintenance performed by factory-trained service representatives, using authorized parts and service techniques, is recommended. Recognizing symptoms of potential trouble and making corrections immediately is less costly and time consuming than repairing damaged equipment. Our Performance Assurance Plan offers scientific maintenance, not merely repair service.

For quality service on this equipment and information on our Performance Assurance Plan, contact Getinge/Castle, Inc. 1777 East Henrietta Road, Rochester, NY 14623-3133 or call 1-800-950-9912.

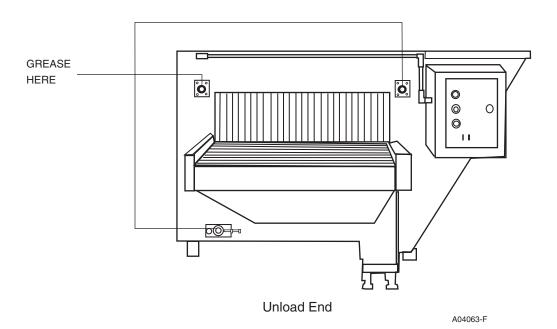
SERVICE REQUIRED	HOW OFTEN?	PROCEDURE
Ensure proper bedding supply.	As needed	Lift the hopper lid and examine the bedding level.
		Fill the hopper with bedding if necessary.
Inspect the fill level of the dust collector	Daily	Turn OFF the power to the dust collector.
(if dust collector option is installed).		Check the level of debris in the lower bag.
		Empty the dust collector if necessary.
Clean the washable inline filter (if dust collector option	Daily	Prepare a bucket of water large enough to fit the inline filter.
is not installed).		Remove the inline filter using the handle.
		Immerse the inline filter in the bucket.
		Agitate the inline filter in the water to remove dirt.
		5. Air-dry the inline filter.
		6. Replace the inline filter in the line.
Apply lubricant to the grease fittings.	Six (6) Months	Apply one shot of all-purpose grease to each of the grease fittings (see Figure 4–1.)

61301604063 4–1

Figure 4–1. GREASE FITTINGS



Load End



### **RECOMMENDED SPARE PARTS LIST**

#### **Consumable Stock**

DESCRIPTION PART NO.

Bedding See

"Compatible Bedding Types\*" on page 3-1.

Lustre Stainless Steel Cleaner/Polish

(13 oz.)

61301600026

Door curtain (1 per door)

Filter bags for Dust Collector (option)

**Spare Parts** 

Refer to the Customer Manual for a list of recommended spare parts. The

electrical schematic is also in the Customer Manual.

61301604063 4–3

Maintenance

# Section 5 Troubleshooting

## **TROUBLESHOOTING**

PROBLEM	PROBABLE CAUSE	CORRECTION		
No power to the control panel.	1. Mains disconnect is OFF. 2. Control panel fuse is blown. 3. POWER light bulb is out. 4. POWER switch is faulty.	<ol> <li>Ensure that the mains disconnect is ON.</li> <li>Check the control panel fuse. Replace if needed.</li> <li>Check the POWER light bulb. Replace if needed.</li> <li>Check the POWER switch. Replace if needed.</li> </ol>		
The unit does not dispense bedding.	Obstruction in dispenser drive.	Check dispenser drive. Clear if needed (see "TO CLEAR THE DISPENSER DRIVE" on page 5-2).		
Conveyor does not run.	<ol> <li>At least one safety switch is open.</li> <li>Conveyor is obstructed.</li> <li>Clutch is loose.</li> </ol>	<ol> <li>Check the safety switches (hopper lid, hopper safety gate, top panel, access panels). Ensure that the safety gate is in place, and that lids and panels are closed.</li> <li>When both hopper safety switches are closed, the light on control relay #1— inside the control box—is lit.)</li> <li>Check for obstruction. Remove the obstruction if needed.</li> <li>Tighten the clutch.</li> </ol> The clutch has been set properly by the manufacturer. It should only be adjusted by an authorized service technician.		
	4. Motor drive malfunction.	4. Check the motor drive. Replace if needed.		
Dust collector is inoperable.	<ol> <li>Obstruction in collecting nozzles.</li> <li>Wiring to the dust collector is faulty.</li> <li>GFI tripped.</li> <li>Circuit breaker tripped.</li> </ol>	<ol> <li>Check for obstruction in collecting nozzles remove obstruction if needed.</li> <li>Check the wiring. Repair if needed.</li> <li>Check and reset. If it trips again, call an authorized service technician.</li> <li>Check and reset. If it trips again, call an authorized service technician.</li> </ol>		

61301604063 5–1

#### TO CLEAR THE DISPENSER DRIVE

- 1. Press and hold the DISPENSER DRIVE switch from FOR-WARD to REVERSE.
- 2. Run the unit in reverse for about ten seconds.
- 3. Release the DISPENSER DRIVE switch so that it switches back to FORWARD.
- 4. Wait for the drive to stop completely.
- 5. Run the unit in forward for about ten seconds.
- 6. If this doesn't clear the dispenser drive, turn OFF the POWER switch. Then call an authorized service technician.

## **Section 6** Installation Instructions

#### INTRODUCTION

This section is for convenient customer reference. It summarizes information used for installing the bedding dispenser.

Official agreements, pertinent drawings, and related documents are provided separately to the customer by authorized personnel.

#### **INSTALLATION OPTIONS**

- Unload & Uncrate by Installation Specialists from GETINGE/Castle, Inc.
- Reassembly by Installation Specialists from GETINGE/Castle, Inc.
- Supervision of Installation by Installation Specialists from GETINGE/Castle, Inc.

### **FACILITY REQUIREMENTS**

The company and the customer typically specify and agree on these requirements:

- Equipment Location
- Minimum Door Opening en route to Equipment Room
- Corridor Width(s)
- Ceiling Height
- Lowest Ceiling
- Obstacles in Equipment Room
- Equipment Room Walls (type)
- Barrier Wall Attachment
- Maximum Crate Size
- Elevator (availability)
- Loading Dock (availability)
- Fork Truck (availability)

61301604063 6–1

### **TECHNICAL DATA**

### **Service Requirements**

The following utilities and services have been furnished by others in accordance to referenced drawings. Electrical services were to be supplied with fused disconnect switches, all exhaust ducts were to be supplied with manual dampers. The utility requirements specified reflect dynamic conditions required at the dispenser.

SERIES 1750 UTILITIES AND SERVICE REQUIREMENTS							
MODEL 1730 MODEL 1736 MODEL 1742 MODEL 1748 MODEL 1754							
TUNNEL WASHER BELT SIZE	24"	30"	36"	42"	48"		
ELECTRICAL DISPENSER	ONLY					NOTE 1	
1 Ph, 60 Hz, 120 V, 3 Wire	20.0 Amp #12 Ga. Wire	20.0 Amp #12 Ga. Wire	20.0 Amp #12 Ga. Wire	20.0 Amp #12 Ga. Wire	20.0 Amp #12 Ga. Wire		
ELECTRICAL DISPENSER	W/ DUST COLLE	ECTION SYSTEM	Л			NOTE 1	
1 Ph, 60 Hz, 120 V, 3 Wire	36.0 Amp #10 Ga. Wire	36.0 Amp #10 Ga. Wire	36.0 Amp #10 Ga. Wire	36.0 Amp #10 Ga. Wire	36.0 Amp #10 Ga. Wire		
POWERED EXHAUST						NOTE 2	
Vent Size	4 ½" OD.						
Flow Rate	650 CFM						
WEIGHTS							
Operational - Lbs.	1,500	1,700	1,900	2,100	2,200		
Shipping - Lbs.	2,000	2,100	2,400	2,500	2,700		
EQUIPMENT DRAWINGS (generic)						_	
Left Side Service	EQ00459A	EQ00143B	EQ00101C	EQ00585A	EQ00460A		
Right Side Service	EQ00436B	EQ00437B	EQ00438B	EQ00584A	EQ00447B		

#### **General Notes On Utilities**

#### NOTE 1—ELECTRICAL CONNECTION

A fused disconnect switch is required, and provided by others. The disconnect switch must be able to be locked and tagged. Location of the disconnect to be per local electrical codes.

#### NOTE 2—EXHAUST SYSTEM

The exhaust vent cannot be tied into the exhaust vent system for the washing equipment. The exhaust from the bedding dispenser has dust particles and must be kept dry through the entire exhaust system.

Powered Exhaust connections are not required when the optional Dust Collection System is selected.

<sup>\*</sup> All specifications are subject to change without notice

### **UNCRATING AND INSPECTION**

# **Uncrating & Equipment Inspection**

Before signing the Bill of Lading and accepting the equipment, inspect the outside of the crate for any visible damage. If any damage has occurred note it on the Bill of Lading.

After accepting the equipment, if any visible damage is apparent, notify the carrier's insurance and process a claim. At this point it is good practice to take pictures of the crate to back up the claim if internal damage has occurred.

Move the crate(s) to the general area where the machine will be set in place. Uncrate the outside of the machine and inspect the contents of the equipment. If damage is apparent, take pictures of the areas.

Upon completion of inspection, set the machine in the spot where the equipment will be connected to the facility's services. Locate the four (4) support legs under the machine. Using a floor pallet lift, (while the machine is still on the lower skid) raise the machine up four inches and place a 4 x 4 x 4 block under each of the support legs. Dismantle and remove the lower skid from under the machine. Raise the machine up using the pallet lift, remove the 4" blocks and lower the machine onto the floor. Make sure that the location of the equipment has at least a 30" clearance around the machine control panel for general maintenance.

# **INSTALLATION**



Installation of equipment should only be done by factory authorized representatives.

Once your machine has been inspected for damage and properly uncrated, you are now ready to install the equipment. The following should be performed in sequence to insure proper installation and operation of your equipment.

# **Equipment Location**

Ensure that your equipment is located as defined by the Equipment Drawings and Room Layout Drawings provided, with adequate clearance for maintenance and proper distance from utility connections. Check that:

☐ Crates are in the room

- ☐ Clear access is available for installation personnel
- ☐ Lighting and 40 AMP/110 volt power are present within 25 feet of the installation area
- ☐ Heating/Air Conditioning is available in the installation area.
- ☐ The floor has been coated/painted under the unit (if applicable).

61301604063 6–3

# **Installation Instructions**

# **Leveling The Machine** Level the machine $\pm 1/16$ " per each four foot length using a bubble level. Start at one of the sides and check the level from front to back and make adjustments. Move to the other side of the machine and check from right to left and make adjustments. The legs are designed to raise or lower the equipment ±1". Because of the slope of the floor it may be necessary to shim under the legs to achieve the leveling tolerance. **Utilities** Check to insure that the following utility requirements are as specified: ☐ Vent connections and flow rates are available as specified on the equipment drawings. **Electrical** ☐ Verify the electrical supply voltage is as specified on the equipment drawings and as noted on the nameplate on the machine. ☐ Ensure the equipment is provided with a fused disconnect switch within 10-15 feet from the unit's control panel.

### **STARTUP**

To ensure proper machine startup, follow these steps:

- Ensure that all utilities are properly connected to the machine and tightened.
- 2. Verify all incoming power supplied by the customer is as called out on the equipment specifications.
- Turn ON the mains disconnect.
- 4. Turn ON the POWER switch on the control panel.

The POWER indicator lights.
If not, check the fuse on the control panel and the power supply to the control box.

- 5. Check the motors to ensure they are in proper rotation.
- 6. Ensure that the dust collector is attached and properly wired to the unit.

# **CHECK-OUT**

# Fill the hopper

- 1. Open the hopper lid. Keep the safety gate in place.
- 2. Partially fill the hopper with bedding.



NEVER OVERFILL THE HOPPER CAPACITY.

Otherwise the dispenser drive may jam. If this occurs, see "TO CLEAR THE DISPENSER DRIVE" on page 5–2.

#### Run the unit

1. On the control panel, turn ON the CONVEYOR DRIVE.



As soon as the DISPENSER DRIVE is ON, bedding will travel from the hopper to be dropped onto the conveyor. Do not turn ON the DISPENSER DRIVE until you are ready for this to occur.

- On the control panel, turn ON the DISPENSER DRIVE.
  - Turn this switch ON to fill the cages with bedding.
  - Keep this switch OFF to let the cages pass through without filling.
- On the control panel, turn ON the DUST COLLECTOR (option).
- 4. Press START.
- 5. Adjust the speed of the DISPENSER DRIVE.

61301604063 6–5

- 6. Turn OFF the POWER switch. Turn OFF the mains disconnect.
- 7. If the bedding dispenser functions properly, this check-out procedure is concluded. If it does not function properly, contact authorized service personnel.

# **Section 7 Options**

# **INTRODUCTION**

The Series 1750 offers options to meet each customer's specific needs. This chapter lists the most commonly selected options. Your washer may not have the options listed, and could have other specific options. For the options selected with your washer, please refer to your Customer Manual.

61301604063 7–1

# **MOST COMMON OPTIONS**

# **Dust Collection System**

POWER SWITCH
POWER CORD
VACUUM
HOSE

A04169-H

#### **DESCRIPTION**

Removes dust generated by the filling operation and airborne particles from the area surrounding the bedding dispenser. Eliminates the need for connection to building exhaust. System consists of a minimum 1.0 HP blower and 36 gallon container connected to the vent of the dispenser.

Power switch—Must be ON to operate.

**Power cord**—Connected to the GFI receptacle on the side of the bedding dispenser.

Vacuum hose—Must be connected to the bedding dispenser exhaust.

#### **USER CONTROLS**

None.

# MAINTENANCE REQUIRED

As needed Remove and clean the bags:

- 1. Remove the retainer band from the filter bag.
- Remove the filter bag. This exposes an opening.
- 3. Remove the collector bag through the opening.
- 4. Clean and replace the bags.

# **Conveyor Stop**

#### **DESCRIPTION**

The conveyor stop uses a photoelectric switch and reflector to stop the conveyor when cages have reached the end of the unload end conveyor.

# **USER CONTROLS**

None.

# **MAINTENANCE REQUIRED**

Clean the reflector with a damp cloth daily.

61301604063 7–3

Options

# Index

A	Conveyor system, 1–6
Access panels, 1–3	D
Access ports, 1–6	D. 11. 11. 12. 10. 4
ADJUSTABLE SPEED—DISPENSER DRIVE	Daily checklist, 3–1
control, 2–3	Data, technical, 6–2
Apron (figure), 1–2 replacement part, 4–3	Debris screen, 1–6 (figure), 1–2
Automatic conveyor stop (option), 1–3	Dispenser drive, 1–4, , 1–6 (figure), 1–5 clearing a jam, 5–2
В	Dispenser drive motor, 1–3
	DISPENSER DRIVE ON light, 2-3
Bedding, compatible types, 3–1	DISPENSER DRIVE ON/OFF switch, 2-3
Bill of Lading, noting damage on, 6-3	DISPENSER DRIVE REVERSE/FORWARD switch, 2–3
С	Door gasket cleaning, 3–1
Capacity, hopper, 1–6	Drawings, equipment numbers, 6-2
Chamber, filling (figure), 1–5	Dust collection system, 1-7, , 7-2, , 7-3
Checklist of daily tasks, 3–1	Dust collector inspect the fill level, 4–1
Check-out, at installation, 6-5	DUST COLLECTOR ON light (option), 2–4
Cleaning, 1–6	DUST COLLECTOR switch, 2–3
Clutch, load conveyor, vii	
Configuration options, 1–1	E
Consumable stock, 4–3	
Control panel, 1-3, , 1-6	Electrical power turning off, 3-5
Control relay #1 (CR1), and safety switches, 5-1	EMERGENCIES
Conveyor, 1–3	emergency power shut off, 3-5
Conveyor drive motor, 1–3	emergency stop, 3–5
CONVEYOR DRIVE ON light, 2-3	EMERGENCY STOP light, 2–4
CONVEYOR DRIVE ON/OFF switch, 2-3	EMERGENCY STOP switch, 2–2
CONVEYOR FULL, 3-4	End Of Daily Operation, 3–4
CONVEYOR FULL light, 2-3	Exhaust, 1–6
Conveyor stop, automatic, 1–7	Exhaust vent, 1–3

61301604063 I–1

F	0
Fall hazard, vii Features standard, 1–6 Filling chamber, 1–5	Operation, 3–4 Options automatic conveyor stop, 1–7 dust collection system, 1–7
Filling the hopper, 3–2	Most common, 7–2 right service side installation, 1–7
Filter, exhaust inline (only if no dust collector), 1–6 cleaning, 4–1	Options, configuration, 1–1
G	P
Gate, hopper safety, 1–4 safety shut-off switch on handle, 1–4 Grease fittings	Part numbers air-in filter, 4–3 door gasket, 4–3 Lustre Stainless Steel Cleaner/Polish, 4–3
(figure), 4–2	Parts, spare, 4–3
lubricate, 4–1	Performance assurance plan, 4-1
н	Performance assurance plan (PAP), 4-1
	Personal hazard and equipment damage, vii
Hopper	POWER light, 2–3
refilling, 3–2	POWER switch, 2–2
Hopper lid, 1–3 safety shut-off, vii	R
Hopper safety gate, 1-4	N.
	Refilling the hopper, 3–2
Injury, personal, vii	REVERSE/FORWARD  see DISPENSER DRIVE REVERSE/ FORWARD switch
	Right service side installation, 1–7
L	
Leveling, 6–4	S
Load hopper	Safety, vii
safety shut-off, vii	Seismic requirements, 1–7
М	Settings For use later, 3–3 For use today, 3–3
Mains disconnect switch, 1–3 (figure), 1–2	Shock hazard, vii
Maintenance	Spare parts, 4–3
Performance assurance plan (PAP), 4-1	START switch, 2–2
schedule, 4–1	Start-up, 3-4
Maintenance contract. See Performance Assurance Plan	Startup, at installation, 6-5
	Storage hopper, 1–3

# T

Technical data. See Data, technical

Top panel, 1-3

Troubleshooting, 5-1

Tunnel washer, linked to the bedding dispenser, 3–1

# U

UL standards, 1-7

Uncrating, 6-3

Use of the bedding dispenser, 1-1

Utilities and services, 6-2

# $\mathbf{W}$

Water collection area, 1–3, , 1–6

Weights, 6-2

61301604063 I–3



